

**Bull Trout Final Critical Habitat Justification: Rationale for Why Habitat is  
Essential, and Documentation of Occupancy**

**Chapter 32. Saint Mary Recovery Unit—Saint Mary River  
Basin Critical Habitat Unit**



## Chapter 32. Saint Mary River Basin Critical Habitat Unit

The Saint Mary River Basin CHU is essential maintaining bull trout distribution within this unique geographic region of the Saint Mary RU because it represents the only bull trout population east of the Continental Divide in the United States. The genetic information to date indicates bull trout in the Saskatchewan River basin (primarily of Alberta, Canada) originated from a cross-divide transfer of fish from the Columbia Basin, probably during the Wisconsin Glaciation, which ended about 10,000 years ago. The headwaters of the South Saskatchewan system include the Crowsnest, Carbondale, Castle, Belly, and Saint Mary Rivers. Of these, only the Saint Mary River system has extensive bull trout habitat in the United States, with much of the spawning and rearing habitat occurring in Montana. FMO habitat occurs primarily downstream in portions of the watershed in southwestern Alberta. Thus, preservation of the southernmost extension of bull trout east of the Continental Divide is dependent on actions in the Saint Mary River Basin CHU (see Appendix 1 for more detailed information).

We are proposing to designate critical habitat for bull trout in identified stream segments and lakes in the Saint Mary River Basin CHU in Montana. The entire U.S. portion of the Saint Mary River drainage, which forms the Saint Mary River Basin CHU, is located in Glacier County, Montana. The total stream distance designated as critical habitat in Montana is about 116.8 km (72.6 mi), and the five lakes have a surface area of about 2,555.4 ha (6,314.5 ac).

Most high elevation waters in Glacier National Park were historically fishless. Due to natural migration barriers, bull trout occupancy in its headwaters of the Belly River drainage (directly west of and adjacent to the Saint Mary River drainage) was confined to only a very minor portion of the U.S habitat near the international border. Due to this restricted U.S. distribution and the fact that all FMO habitat for these populations is in Alberta, Canada, the Belly River headwaters in unroaded backcountry of Glacier National Park are not included in this critical habitat designation.

The following water bodies are included in this CHU (see Table 97):

- (A) The entire mainstem of the Saint Mary River in the United States, including 26.7 km (16.6 mi) of the River upstream of the international border, is FMO habitat. Designated critical habitat in the Saint Mary River Basin CHU includes the basins of Lower Saint Mary Lake (886 ha (2,189 ac)) and Saint Mary Lake (1,571 ha (3,883 ac)) to their high water marks. A very short 0.3 km (0.2 mi) reach of the upper Saint Mary River, upstream of Saint Mary Lake to the base of Saint Mary Falls, provides spawning and rearing habitat.
- (B) Divide Creek from its junction with the Saint Mary River (between the Saint Mary Lakes) upstream 7.2 km (4.5 mi) to a natural barrier provides spawning and rearing habitat.
- (C) Swiftcurrent Creek from its confluence with the Saint Mary River upstream 4.1 km (2.5 mi) to the confluence of Boulder Creek provides FMO habitat. Boulder Creek from its confluence with Swiftcurrent Creek upstream 13.6 km (8.4 mi) to its headwaters provides spawning and rearing habitat.
- (D) Kennedy Creek from its confluence with the Saint Mary River upstream 22.0 km (13.7 mi) to a natural barrier at the outlet of Poia Lake provides spawning and rearing habitat. Its tributary, Otatso Creek, from its junction with Kennedy Creek upstream 13.4 km (8.3 mi) to a natural

barrier located near the Glacier National Park boundary with the Blackfeet Indian Reservation provides spawning and rearing habitat.

(E) The upper mainstem of Lee Creek (12.5 km (7.8 mi)) and its tributary Middle Fork Lee Creek (4.3 km (2.7 mi)) upstream to fish passage barriers in their upper reaches, provide spawning and rearing habitat. These drainages start in the United States and flow north into Alberta; the fish migrate from FMO habitat in portions of the Saint Mary River system in Alberta, Canada.

The following lakes and attached stream segments designated as critical habitat for bull trout are isolated to varying degrees from full connectivity with the Saint Mary River and are considered separate core areas. In these cases, the lake and its upstream spawning and rearing habitat are identified.

(F) The basin of Red Eagle Lake (55 ha (136 ac)) provides FMO habitat and its tributary, Red Eagle Creek, from the lake upstream approximately 1.5 km (1.0 mi) to an unnamed barrier falls provides spawning and rearing habitat.

(G) The basin of Cracker Lake (17 ha (42 ac)) provides FMO habitat for a population of bull trout believed to have been introduced by miners in the early 20th century. Its tributary, Canyon Creek, from the lake upstream 1.5 km (1.0 mi) provides spawning and rearing habitat.

(H) The two interconnected basins of the Slide Lakes (18 ha (45 ac)) provide FMO habitat. Upstream reaches of Otatso Creek from the Slide Lakes upstream 6.6 km (4.1 mi) to an unnamed barrier falls, including a short reach of stream between the lake basins, are spawning and rearing habitat. Table 97. Water body segments designated as critical habitat for bull trout, including documentation of occupancy and the site-specific rationale in the Saint Mary River CHU/CHSU

**Table 97. Water body segments designated as critical habitat for bull trout, including documentation of occupancy and site-specific rationale in the Saint Mary River Basin CHU/CHSU**

CHU—CHSU	Water Body Name	State	Information Documenting Bull Trout Occupancy	Essential Habitat Rationale	LLID
Saint Mary River Basin—None	Boulder Creek	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	13-58 bull trout redds per year in 9 counts conducted over 1999-2008 (MFWP 2009b). Designated as a local population in the draft Bull Trout Recovery Plan (Service 2002a).	1134598 488389
Saint Mary River Basin—None	Divide Creek	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	Designated as a local population in the draft Bull Trout Recovery Plan (Service 2002a). Evidence of sporadic bull trout spawning, but routine rearing (Mogen and Kaeding 2007).	1134375 487508
Saint Mary River Basin—None	Kennedy Creek	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	11-27 bull trout redds per year in 9 counts conducted over 1999-2008 (MFWP 2009b). Designated as a local population in the draft Bull Trout Recovery Plan (Service 2002a).	1134094 489054
Saint Mary River Basin—None	Lee Creek	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	Designated as a local population in the draft Bull Trout Recovery Plan (Service 2002a). Evidence of sporadic bull trout spawning, but routine rearing (Mogen and Kaeding 2007).	1136006 489982
Saint Mary River Basin—None	Middle Fork Lee Creek	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	Designated as a local population in the draft Bull Trout Recovery Plan (Service 2002a). Evidence of sporadic bull trout spawning, but routine rearing (Mogen and Kaeding 2007).	1135499 489983
Saint Mary River Basin—None	Otatso Creek	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	Designated as a local population in the draft Bull Trout Recovery Plan (Service 2002a). Evidence of sporadic bull trout spawning, but routine rearing (Mogen and Kaeding 2007).	1134645 489145
Saint Mary River Basin—None	Saint Mary River	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	Migratory corridor connecting Saint Mary River to local populations designated in the draft Bull Trout Recovery Plan (Service 2002a).	1133271 489984

CHU—CHSU	Water Body Name	State	Information Documenting Bull Trout Occupancy	Essential Habitat Rationale	LLID
Saint Mary River Basin—None	Swiftcurrent Creek	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	Migratory corridor connecting Boulder Creek and Saint Mary River to local populations designated in the draft Bull Trout Recovery Plan (Service 2002a).	1134241 488336
Saint Mary River Basin—None	Canyon Creek	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	Designated as a local population in the draft Bull Trout Recovery Plan (Service 2002a). Evidence of bull trout SR activity (Mogen and Kaeding 2007).	113619 2487988
Saint Mary River Basin—None	Red Eagle Creek	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	Designated as a local population in the draft Bull Trout Recovery Plan (Service 2002a). Evidence of bull trout SR activity (Mogen and Kaeding 2007).	1134808 487077
Saint Mary River Basin—None	Cracker Lake	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	Identified as a core area (Service 2002a).	1136442 487436
Saint Mary River Basin—None	Lower St. Mary Lake	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	Identified as part of a core area complex (Service 2002a).	1134227 487955
Saint Mary River Basin—None	Otatso Lake	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	Identified as part of a core area complex (Service 2002a).	1136768 488918
Saint Mary River Basin—None	Red Eagle Lake	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	Identified as a core area (Service 2002a).	1135065 486518
Saint Mary River Basin—None	Slide Lakes - lower pool	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	Identified as part of a core area complex (Service 2002a).	1136157 489049
Saint Mary River Basin—None	Slide Lakes - upper pool	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	Identified as part of a core area complex (Service 2002a).	1136252 489018
Saint Mary River Basin—None	St. Mary Lake	MT	Documented in MFISH database (MFWP 2009a), Mogen and Kaeding (2004, 2005a, 2005b, 2006, 2007), and Service (2008f).	Identified as part of a core area complex (Service 2002a).	1135091 486985